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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,774	Applicant(s) SHINDO ET AL.	
	Examiner MARY ANNE KAY	Art Unit 2426	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. This Office Action is in response to an AMENDMENT entered September 20, 2010 for the patent application 10/594774 filed on September 29, 2006.
2. The Office Actions of November 10, 2009 and May 21, 2010 are fully incorporated into this Office Action by reference.

Status of Claims

3. Claims 1-6 and 9-18 are pending in this application.

Claim Rejections - 35 USC § 102

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by Dimitrova et al. (U.S. PGPub 2006/0041915 A1, referred to as **Dimitrova**).

Claim 6

Dimitrova anticipates:

A mobile data terminal comprising:

an input unit that receives an input from a user (**Dimitrova** ¶ 0024; EN: User

input interface which receives input control signals from an input device);

a transmission unit that transmits user select information received by the input

unit to the accumulation display device (**Dimitrova** ¶ 0030; EN: Handheld

device may be used to control the operation of the residential gateway

system);

a reception unit that receives a program content restructured based on the user

select information from the accumulation display device (**Dimitrova** ¶¶

0025-0027, 0030; EN: Handheld device may be used to control the

operation of the residential gateway system); and

a display unit connected with the reception unit (**Dimitrova** ¶ 0026; EN: Display

screen);

wherein the reception unit receives restructured program content from the

accumulation display device, and the display unit of the mobile data

terminal displays the received and restructured program content in a

manner that an original program content received by the accumulation

display is displayed in parallel on the main display unit of the accumulation

display device (**Dimitrova** ¶¶ 0025-0026; EN: HDTV Broadcast video transcoded and output to handheld device).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrader et al. (U.S. PGPub 2002/0166123 A1, referred to as **Schrader**) in view of Nejime et al. (U.S. Patent 7,272,843, referred to as **Nejime**) in further view of **Dimitrova**, Paragraph 19. below applies.

Claim 1

Schrader teaches:

An accumulation display device comprising:

a reception unit that receives a currently broadcasted program content, index information associating a currently broadcasted program content with an index and specifying a scene of the program and trigger information including mode information for special reproduction of the program content and constituting metadata with the index information (**Schrader** ¶¶ 0055-

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0056, 0120; Examiner's Note (EN): Client receiver receives content with index and metadata with triggering information. Paragraph 19. below applies);

an accumulation unit that accumulates the program content, the index information and the trigger information (**Schrader ¶¶ 0054, 0120; EN:** Content, index, and information about the triggering event are recorded. Paragraph 19. below applies);

a main display unit receiving and displaying the input of the program content received by the reception unit (**Schrader ¶ 0035; EN:** Video display divided into various display areas including a navigation display portion and a program display portion. Paragraph 19. below applies);

a metadata interpretation unit that interprets the index information and the trigger information of the currently broadcasted or the accumulated program content and outputs mode information for special reproduction (**Schrader ¶ 0134; EN:** Metadata unit includes playback information for special inquiries. Paragraph 19. below applies); and

an accumulated image processing unit extracting at least a part of the program content based on the mode information from the trigger information, restructures the program content extracted based on the mode information, restructures the program content extracted based on the mode information (**Schrader ¶¶ 0066-0067; EN:** Highlight logs of the

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content are used by the client system for assembling the content according to specific playback modes. Paragraph 19. below applies);

Schrader fails to teach:

an accumulated image processing unit connected with a mobile data terminal functioning as a sub reception and display unit, and outputs the restructured program content;

the index information includes a program ID for identifying a program corresponding to the index information, an ID for identifying the index information start time data of the corresponding program, and finish time data of the corresponding program.

the accumulated image processing unit outputs the restructured program content to the mobile data terminal, and displays the restructured program content on the mobile data terminal in a manner that the currently broadcasted original program content received by the reception unit is displayed in parallel on the main display unit.

Nejime teaches:

the index information includes a program ID for identifying a program corresponding to the index information, an ID for identifying the index information start time data of the corresponding program, and finish time data of the corresponding program (**Nejime** C6:6-41; EN: Start and end time in auxiliary information).

Rationale:

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** with the program ID as taught by **Nejime** for the purpose of providing making it possible to play back the program in a mode interlocked with auxiliary information with the auxiliary information used as a supplement to broadcast information.

Schrader in view of **Nejime** fails to teach:

an accumulated image processing unit connected with a mobile data terminal functioning as a sub reception and display unit, and outputs the restructured program content;

the accumulated image processing unit outputs the restructured program content to the mobile data terminal, and displays the restructured program content on the mobile data terminal in a manner that the currently broadcasted original program content received by the reception unit is displayed in parallel on the main display unit.

Dimitrova teaches:

an accumulated image processing unit connected with a mobile data terminal functioning as a sub reception and display unit, and outputs the restructured program content (**Dimitrova** ¶¶ 0025-0026; EN: Broadcast video transcoded and output to handheld device);

the accumulated image processing unit outputs the restructured program content to the mobile data terminal, and displays the restructured program content on the mobile data terminal in a manner that the currently broadcasted

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original program content received by the reception unit is displayed in parallel on the main display unit (**Dimitrova** ¶¶ 0025-0026; EN: Broadcast video transcoded and output to handheld device. Examiner interprets that example of HDTV is broadcast in to gateway receiver and handheld device. Paragraph 19. below applies).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** in view of **Nejime** with the mobile data terminal as taught by **Dimitrova** for the purpose of providing a residential gateway system having a handheld controller for communicating with and controlling the residential gateway system, in which the communication channel between the residential gateway system and the handheld controller is used efficiently.

Claim 2**Schrader** teaches:

wherein the trigger information includes mode information for performing special reproduction of **at least anyone** of interlocked reproduction, replay reproduction, highlight reproduction, and follow reproduction of a currently viewed program content (**Schrader** ¶ 100; EN: Trigger notifies of extended video recording. Paragraph 19. below applies).

Claim 3**Schrader** teaches:

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further comprising a display unit that displays the currently broadcasted or the accumulated program content and the mode information for special reproduction (**Schrader** Fig. 5 el. 122; ¶ 0077; EN; Display device).

Claim 16**Schrader** teaches:

An interlocked display system comprising
an accumulation display device receiving and displaying a currently broadcasted program content as a main reception and display terminal (**Schrader** ¶¶ 0055-0056, 0120; EN: Client receiver receives content with index and metadata with triggering information. Paragraph 19. below applies);

the accumulation display device including:

a reception unit that receives a currently broadcasted program content, index information associating a currently broadcasted program content with an index and specifying a scene of the program and trigger information including mode information for special reproduction of the program content and constituting metadata with the index information (**Schrader** ¶¶ 0055-0056, 0120; EN: Client receiver receive content with index and metadata with triggering information. Paragraph 19. below applies);

an accumulation unit that accumulates the program content, the index information and the trigger information (**Schrader** ¶¶ 0054, 0120; EN: content, index, and information about the triggering event are recorded. Paragraph 19. below applies);

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a main display unit receiving and displaying the input of the program content received by the reception unit (**Schrader ¶ 0035**; EN: video display divided into various display areas including a navigation display portion and a program display portion. Paragraph 19. below applies);

a metadata interpretation unit that interprets the index information and the trigger information of the currently broadcasted or the accumulated program content and outputs mode information for special reproduction (**Schrader ¶ 0134**; EN: Metadata unit include playback information for special inquiries. Paragraph 19. below applies); and

the accumulated image processing unit extracting at least a part of the program content from the index information based on contents of the trigger information, restructures the program content extracted based on the mode information (**Schrader ¶ 100**; EN: Trigger notifies recorder to record event without user intervention. Paragraph 19. below applies).

Schrader fails to teach:

the accumulation display device including:

the accumulated image processing unit connected with the mobile data terminal, and outputs the restructured program content to the mobile data terminal;

the index information includes a program ID for identifying a program corresponding to the index information, an ID for identifying the index information, starttime data of the corresponding program, and finishtime data of the corresponding program,

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a mobile data terminal connected with the accumulation display device and receiving a program content restructured for special reproduction from the accumulation display device and displaying the restructured program content as a sub reception and display terminal,

the mobile data terminal including:

an input unit that receives an input from a user;

a transmission unit that transmits user select information received by the input unit to the accumulation display device;

a reception unit that receives a program content restructured based on the user select information from the accumulation display device; and

a display unit connected with the reception unit;

wherein, between the accumulation display device and the mobile data terminal, the accumulated image processing unit of the accumulation display device extracts at least a part of the program content from the index information based on contents of the trigger information, restructures the program content extracted based on the mode information, and outputs the restructured program content to the mobile data terminal; and

the reception unit of the mobile data terminal receives restructured program content from the accumulation display device, and the display unit of the mobile data terminal displays the received and restructured program content in a manner that the currently broadcasted original program

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content received by the accumulation display is displayed in parallel on the main display unit of the accumulation display device.

Nejime teaches:

the index information includes a program ID for identifying a program corresponding to the index information, an ID for identifying the index information, starttime data of the corresponding program, and finishtime data of the corresponding program (**Nejime** C6:6-41; EN: Start and end time in auxiliary information),

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** with the program ID as taught by **Nejime** for the purpose of providing making it possible to play back the program in a mode interlocked with auxiliary information with the auxiliary information used as a supplement to broadcast information.

Schrader in view of **Nejime** fails to teach:

the accumulation display device including:

the accumulated image processing unit connected with the mobile data terminal, and outputs the restructured program content to the mobile data terminal;

a mobile data terminal connected with the accumulation display device and receiving a program content restructured for special reproduction from the accumulation display device and displaying the restructured program content as a sub reception and display terminal,

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a mobile data terminal including:

an input unit that receives an input from a user.

a transmission unit that transmits user select information received by the input unit to the accumulation display device;

a reception unit that receives a program content restructured based on the user select information from the accumulation display device; and

a display unit connected with the reception unit;

wherein, between the accumulation display device and the mobile data terminal, outputs the restructured program content to the mobile data terminal; and

the reception unit of the mobile data terminal receives restructured program content from the accumulation display device, and the display unit of the mobile data terminal displays the received and restructured program content in a manner that the currently broadcasted original program content received by the accumulation display is displayed in parallel on the main display unit of the accumulation display device.

Dimitrova teaches:

the accumulation display device including:

the accumulated image processing unit connected with the mobile data terminal, and outputs the restructured program content to the mobile data terminal

(**Dimitrova ¶¶ 0025-0026**; EN: Broadcast video transcoded and output to handheld device.);

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a mobile data terminal connected with the accumulation display device and receiving a program content restructured for special reproduction from the accumulation display device and displaying the restructured program content as a sub reception and display terminal (**Dimitrova ¶¶ 0025-0026**; EN: Broadcast video transcoded and output to handheld device. Examiner interprets that example of HDTV is broadcast in to gateway receiver and handheld device. Paragraph 19. below applies),

a mobile data terminal including:

an input unit that receives an input from a user (**Dimitrova ¶¶ 0024, 0030**; EN: Keyboard).

a transmission unit that transmits user select information received by the input unit to the accumulation display device (**Dimitrova ¶¶ 0024, 0030**; EN: Handheld device connected to gateway via network);

a reception unit that receives a program content restructured based on the user select information from the accumulation display device (**Dimitrova ¶¶ 0025-0027, 0030**; EN: Handheld device may be used to control the operation of the residential gateway system); and

a display unit connected with the reception unit (**Dimitrova ¶ 0026**; EN: Display screen);

wherein, between the accumulation display device and the mobile data terminal, the accumulated image processing unit of the accumulation display device extracts at least a part of the program content from the index information

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based on contents of the trigger information, restructures the program content extracted based on the mode information outputs the restructured program content to the mobile data terminal (**Dimitrova ¶¶ 0027-0030**; EN: Display modes triggered by the handheld device. Paragraph 19. below applies); and

the reception unit of the mobile data terminal receives restructured program content from the accumulation display device, and the display unit of the mobile data terminal displays the received and restructured program content in a manner that the currently broadcasted original program content received by the accumulation display is displayed in parallel on the main display unit of the accumulation display device (**Dimitrova ¶¶ 0025-0026**; EN: HDTV Broadcast video transcoded and output to handheld device).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** in view of **Nejime** with the mobile data terminal as taught by **Dimitrova** for the purpose of providing a residential gateway system having a handheld controller for communicating with and controlling the residential gateway system, in which the communication channel between the residential gateway system and the handheld controller is used efficiently.

Claim 17

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Schrader et al. fails to teach:

wherein the accumulation display device as a server transmits a restructured program content to the mobile data terminal via a network.

Dimitrova teaches:

wherein the accumulation display device as a server transmits a restructured program content to the mobile data terminal via a network (**Dimitrova** ¶¶ 0024, 0030; EN: Handheld device connected to gateway via network).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** in view of **Nejime** with the mobile data terminal as taught by **Dimitrova** for the purpose of providing a residential gateway system having a handheld controller for communicating with and controlling the residential gateway system, in which the communication channel between the residential gateway system and the handheld controller is used efficiently.

Claim Rejections - 35 USC § 103

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of Shteyn (U.S. PGPub 2002/0144007 A1, referred to as **Shteyn**), Paragraph 19. below applies.

Claim 4

Schrader teaches:

wherein the accumulated image processing unit extracts at least a part of the accumulated program content based on trigger information received after the request or the latest trigger information of the request, and outputs the restructured program content (**Schrader** ¶¶ 0066-0067; EN: Highlight logs of the content are used by the client system for assembling the content according to specific playback modes. Paragraph 19. below applies).

Schrader et al. fails to teach:

according to a request of mode information for special reproduction from a sub-display device receiving a restructured program content.

Shteyn teaches:

according to a request of mode information for special reproduction from a sub-display device receiving a restructured program content (**Shteyn** ¶ 0031; EN: Information in the meta-data enables the user to receive information from the set-top box that has been received from a broadcaster. Examiner interprets that there is additional information in meta-data regarding structure of information to be sent to user. Paragraph 19. below applies).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the meta-data information as taught by **Shteyn** for the purpose of providing information content associated with the network.

Claim Rejections - 35 USC § 103

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of **Shteyn** in further view of Kinno et al. (U.S. PGPub 2003/0154217 A1, referred to as **Kinno**), Paragraph 19. below applies.

Claim 5

Schrader et al. fails to teach:

a sub-display device management unit that manages terminal information
including a terminal ID and performance of at least one mobile data
terminal receiving a restructured program content Hamano,
wherein the accumulated image processing unit processes and outputs a
program content according to performance of each sub-display device.

Shteyn teaches:

wherein the accumulated image processing unit processes and outputs a
program content according to performance of each sub-display device
(**Shteyn** ¶ 0061; EN: Each device may be different).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the specific client configuration as taught by **Shteyn** for the purpose of providing output in accordance with the user's preferences and the preferred service providers.

Schrader et al. fails to teach:

a sub-display device management unit that manages terminal information including a terminal ID and performance of at least one sub-display device receiving a restructured program content.

Kinno teaches:

a sub-display device management unit that manages terminal information including a terminal ID and performance of at least one mobile data terminal receiving a restructured program content (**Kinno** Fig. 18, el. 1501; ¶¶ 0025, 0126-0131; EN: Examiner interprets the user identification as the terminal ID and mobile networks are included. Examiner interprets that mobile data terminals are included. Paragraph 19. below applies),

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the management unit as taught by **Kinno** for the purpose of providing a process regarding the information delivery system.

Claim Rejections - 35 USC § 103

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of **Kinno**.

Claim 9

Schrader et al. fails to teach:

wherein the index information further includes meaning information describing contents of a program content specified by an index at a keyword level.

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Kinno teaches:

wherein the index information further includes meaning information describing contents of a program content specified by an index at a keyword level (**Kinno** ¶ 0021).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the description as taught by **Kinno** for the purpose of providing information for the client.

Claim Rejections - 35 USC § 103

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of **Shteyn** in further view of **Kinno** in further view of Gardere et al. (U.S. Patent 6,678,332, referred to as **Gardere**), Paragraph 19. below applies.

Claim 10

Schrader et al. fails to teach:

mode information for identifying the trigger information.

start time specifying an extracted scene, and extraction time, thereby specifying timing transmitting at least a part of the program content to the mobile data terminal;

wherein the trigger information includes one or more of a program ID for identifying a program corresponding to the trigger information.

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Shteyn teaches:

mode information for identifying the trigger information (**Shteyn** ¶ 0031),

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the meta-data information as taught by **Shteyn** for the purpose of providing information content associated with the network.

Schrader et al. fails to teach:

start time specifying an extracted scene, and extraction time, thereby specifying timing transmitting at least a part of the program content to the mobile data terminal,

wherein the trigger information includes one or more of a program ID for identifying a program corresponding to the trigger information.

Kinno teaches:

start time specifying an extracted scene, and extraction time, thereby specifying timing transmitting at least a part of the program content to the mobile data terminal (**Kinno** ¶¶ 0089-0092).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the times as taught by **Kinno** for the purpose of providing verification of the sequence

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information according to a request of the controlling media received from client terminal.

Schrader et al. fails to teach:

wherein the trigger information includes one or more of a program ID for identifying a program corresponding to the trigger information.

Gardere teaches:

wherein the trigger information includes one or more of a program ID for identifying a program corresponding to the trigger information (**Gardere** C26:23-30; EN: Paragraph 19. below applies).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the program ID as taught by **Gardere** for the purpose of providing program information identification numbers to allow the appropriate viewing according to the authorization of the client.

Claim Rejections - 35 USC § 103

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of **Shteyn** in further view of **Kinno** in further view of **Gardere** in further view of Zander et al. (U.S. Patent 6,360,218, referred to as **Zander**), Paragraph 19. below applies.

Claim 11

Schrader et al. fails to teach:

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mode information for identifying the trigger information;
thereby specifying timing transmitting at least a part of the program content to the
mobile data terminal;
wherein the trigger information includes a program ID for identifying a program
corresponding to the trigger information;
a specified index ID for identifying specified index information.

Shteyn teaches:

mode information for identifying the trigger information (**Shteyn** ¶ 0031; EN:
Information in the meta-data enables the user to receive information from
the set-top box that has been received from a broadcaster. Examiner
interprets that there is additional information in meta-data regarding
structure of information to be sent to user. Paragraph 19. below applies),

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to modify the teachings of **Schrader** et al. with the meta-
data information as taught by **Shteyn** for the purpose of providing information
content associated with the network.

Schrader et al. fails to teach:

thereby specifying timing transmitting at least a part of the program content to the
mobile data terminal.

Kinno teaches:

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thereby specifying timing transmitting at least a part of the program content to the mobile data terminal (**Kinno** ¶ 0010; EN: Start time and Finish time retrieved).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the timeframe as taught by **Kinno** for the purpose of providing information to the client for appropriate scene retrieval.

Schrader et al. fails to teach:

wherein the trigger information includes a program ID for identifying a program corresponding to the trigger information.

Gardere teaches:

wherein the trigger information includes a program ID for identifying a program corresponding to the trigger information (**Gardere** C26:23-30; EN: The clip identification attributes are analogous to the attributes in the metadata index attributes. Paragraph 19. below applies).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the program ID as taught by **Gardere** for the purpose of providing identification of the components in the stream.

Schrader et al. fails to teach:

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a specified index ID for identifying specified index information.

Zander teaches:

a specified index ID for identifying specified index information (**Zander** C8:3-5;
EN: Record Identifier),

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the index number as taught by **Zander** for the purpose of providing an ordered index which can be used by the client.

Claim Rejections - 35 USC § 103

12. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of **Shteyn** in further view of **Kinno** in further view of **Gardere** in further view of **Zander** in further view of Munetsugu et al. (U.S. Patent 7,134,074, referred to as **Munetsugu**).

Claim 12

Schrader et al. fails to teach:

wherein the trigger information further includes meaning information describing a
program content associated with index information at a keyword level;
grading index information of weight of the meaning information according to a
degree of importance of the program content.

Kinno teaches:

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wherein the trigger information further includes meaning information describing a program content associated with index information at a keyword level (Kinno ¶ 0021),

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the keywords as taught by **Kinno** for the purpose of providing information for the client.

Schrader et al. fails to teach:

grading index information of weight of the meaning information according to a degree of importance of the program content.

Munetsugu teaches:

grading index information of weight of the meaning information according to a degree of importance of the program content (**Munetsugu** C5:49-C6:22; EN: Importance of partial program taken into account during restructuring).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the Importance as taught by **Munetsugu** for the purpose of providing importance information based on criteria concerning the client that is decided at the broadcaster.

Claim 15

Schrader teaches:

wherein the trigger information includes accumulation instruction information instructing accumulation of the corresponding program content (**Schrader** ¶ 0128; EN: Data alert is analogous with instruction to link additional programming).

Claim Rejections - 35 USC § 103

13. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Nejime** in further view of **Dimitrova** in further view of Hoshino et al. (U.S. PGPub 2004/0249861 A1, referred to as **Hoshino**) in further view of **Munetsugu**.

Claim 13

Schrader et al. fails to teach:

wherein the accumulated image processing unit adds, to the restructured program content, superimpose information displayed as an image separate from the program content, and changes and restructures time of each partial program content at restructuring the partial program content based on meaning information included in the trigger information and the index information

Hoshino teaches:

wherein the accumulated image processing unit adds, to the restructured program content, superimpose information displayed as an image separate from the program content (**Hoshino** ¶¶ 0207-208; EN: Metadata converted to video data for superimposition).

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Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the metadata as taught by **Hoshino** for the purpose of providing synthesized video signal for the client.

Schrader et al. fails to teach:

changes and restructures time of each partial program content at restructuring the partial program content based on meaning information included in the trigger information and the index information.

Munetsugu teaches:

changes and restructures time of each partial program content at restructuring the partial program content based on meaning information included in the trigger information and the index information (**Munetsugu** C5:49-C6:22; EN: Importance of partial program taken into account during restructuring).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the importance as taught by **Munetsugu** for the purpose of providing importance information based on criteria concerning the client that is decided at the broadcaster.

Claim 14

Schrader et al. fails to teach:

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wherein the superimpose information is generated using any of meaning information of trigger information, a trigger name, and meaning information of index information.

Hoshino teaches:

wherein the superimpose information is generated using any of meaning information of trigger information, a trigger name, and meaning information of index information (**Hoshino** ¶¶ 0207-208; EN: Metadata converted to video data for superimposition).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** et al. with the metadata as taught by **Hoshino** for the purpose of providing synthesized video signal for the client.

Claim Rejections - 35 USC § 103

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader** in view of **Dimitrova**, Paragraph 19. below applies.

Claim 18

Schrader teaches:

An interlocked display method using an accumulation display device reproducing a currently broadcasted program content and a mobile data terminal interlocking with the accumulation display device to perform special

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reproduction of the program content, the accumulation display device comprising the steps of:

receiving the currently broadcasted program content, index information

associating a currently broadcasted program content with an index and

specifying a scene of the program and trigger information including mode

information for special reproduction of the program content and

constituting metadata with the index information (**Schrader ¶¶** 0055-0056,

0120; EN: Client receiver receives content with index and metadata with

triggering information. Paragraph 19. below applies);

accumulating the program content, the index information and the trigger

information (**Schrader ¶¶** 0054, 0120; EN: Content, index, and information

about the triggering event is recorded. Paragraph 19. below applies);

displaying the received program content (**Schrader ¶** 0035; EN: Video display

divided into various display areas including a navigation display portion

and a program display portion. Paragraph 19. below applies);

extracting at least a part of the accumulated program content associated with the

index information based on mode information from the trigger information,

restructuring the program content extracted based on the mode

information, (**Schrader ¶¶** 0066-0067; EN: Highlight logs of the content

are used by the client system for assembling the content according to

specific playback modes. Paragraph 19. below applies),

Schrader fails to teach:

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outputting the restructured program content to the mobile data terminal,
wherein, in the step of outputting the restructured program content to the mobile data terminal, extracting at least a part of the program content from the index information based on contents of the trigger information, restructuring the program content extracted based on the mode information, and outputting the restructured program content to the mobile data terminal,

the data terminal comprising the steps of:

receiving the program content restructured from the accumulation display device;

and

displaying the received and restructured program content in a manner that the currently broadcasted original program content received by the accumulation display is displayed in parallel on a main display unit of the accumulation display device.

Dimitrova teaches:

outputting the restructured program content to the mobile data terminal

(**Dimitrova** ¶¶ 0025-0026; EN: Broadcast video transcoded and output to handheld device. Examiner interprets that example of HDTV is broadcast in to gateway receiver and handheld device. Paragraph 19. below applies),

wherein, in the step of outputting the restructured program content to the mobile data terminal, extracting at least a part of the program content from the

index information based on contents of the trigger information, restructuring the program content extracted based on the mode information, and outputting the restructured program content to the mobile data terminal (**Dimitrova ¶¶ 0027-0030**; EN: Display modes triggered by the handheld device. Paragraph 19. below applies),

the data terminal comprising the steps of:

receiving the program content restructured from the accumulation display device (**Dimitrova ¶¶ 0025-0026**; EN: Broadcast video transcoded and output to handheld device. Examiner interprets that example of HDTV is broadcast in to gateway receiver and handheld device. Paragraph 19. below applies); and

displaying the received and restructured program content in a manner that the currently broadcasted original program content received by the accumulation display is displayed in parallel on a main display unit of the accumulation display device (**Dimitrova ¶¶ 0025-0026**; EN: Broadcast video transcoded and output to handheld device. Examiner interprets that example of HDTV is broadcast in to gateway receiver and handheld device. Paragraph 19. below applies).

Rationale:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of **Schrader** in view of **Nejime** with the mobile data terminal as taught by **Dimitrova** for the purpose of providing a

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residential gateway system having a handheld controller for communicating with and controlling the residential gateway system, in which the communication channel between the residential gateway system and the handheld controller is used efficiently.

Response to Arguments

15. In reference to Applicant's argument:

Claim 1, as amended, includes features that are neither disclosed nor suggested by the cited art

None of the cited art, however, disclose or suggest an accumulation display device including a main display unit connected with a mobile data terminal functioning as a sub reception and display unit (via an accumulated image processing unit), as required by claim 1. The cited art are silent regarding any connection of an accumulation display device (a main display unit) and a mobile data terminal (a sub display unit). Accordingly, none of the cited art can teach, either alone or in combination, that an accumulated image processing unit outputs and displays restructured program content on the mobile data terminal such that the currently broadcasted original program content is displayed in parallel on the main display unit, as required by claim 1. The cited art are silent regarding these features.

Examiner's Response:

Applicant's amendments have been fully considered and are persuasive.

Therefore, the rejections for claims 1, 6, 16 and 18 have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as follows:

For Claims 1 and 16 in view of Schrader et al. (U.S. PGPub 2002/0166123) and Nejime et al. (U.S. Patent 7,272,843) and Dimitrova et al. (U.S. PGPub 2006/0041915).

For Claim 6 in view of Dimitrova et al. (U.S. PGPub 2006/0041915).

For Claim 18 in view of Schrader et al. (U.S. PGPub 2002/0166123) and Dimitrova et al. (U.S. PGPub 2006/0041915).

Examination Considerations

16. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969) (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

17. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

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18. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

19. Examiner's Opinion: ¶¶ 16.-18. apply. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

20. Claims 1-6 and 9-18 are rejected.

Correspondence Information

21. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to MARY ANNE KAY whose telephone number is (571)270-5677, FAX (571)270-6677, e-mail mary.kay@uspto.gov. The Examiner can normally be reached on Monday -Thursday and every other Friday, 8:00 AM - 5:00 PM, EST.

As detailed in MPEP 502.03, communications via Internet e-mail are at the discretion of the Applicant. Without a written authorization by Applicant recorded in the

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Applicant's file, the USPTO will not respond via e-mail to any Internet correspondence which contains information subject to the confidentiality requirement as set forth in 35 U.S.C. 122. A paper copy of such correspondence will be placed in the appropriate patent application. The following is an example authorization which may be used by the Applicant:

Notwithstanding the lack of security with Internet Communications, I hereby authorize the USPTO to communicate with me concerning any subject matter related to the instant application by e-mail. I understand that a copy of such communications related to formal submissions will be made of record in the applications file.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Joseph Hirl can be reached on (571)272-3685. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

Hand delivered to:

Receptionist,

Customer Service Window,

Randolph Building,

401 Dulany Street,

Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571)273-8300 (for formal communications intended for entry).

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Mary Anne Kay
Examiner

/Joseph P. Hirl/
Supervisory Patent Examiner, Art Unit 2426
December 3, 2010